Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

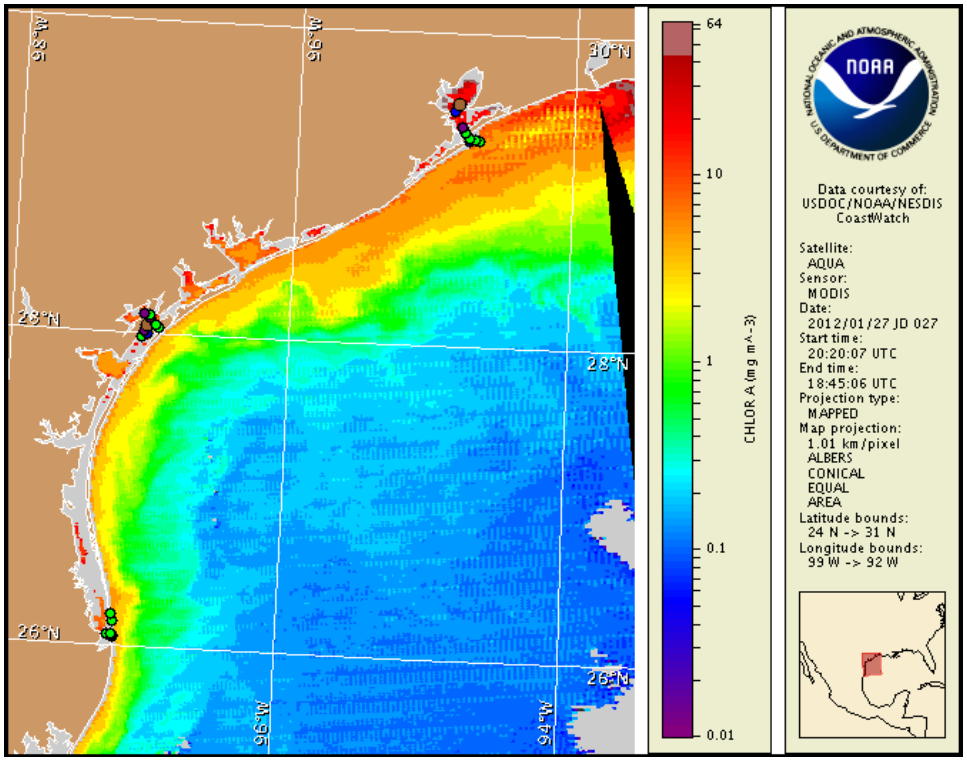
Monday, 30 January 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 26, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 20 to 27 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

A patchy harmful algal bloom is present in the Galveston and Port Aransas/Corpus Christi Bay areas. Patchy low impacts are possible in the Galveston Bay area today through Tuesday and in the Port Aransas/Corpus Christi Bay area today through Wednesday. Patchy very low impacts are possible in the Galveston Bay area on Wednesday. No additional impacts are expected at the coast in Texas today through Wednesday, February 1. The Texas Department of State Health Services (DSHS) continues to monitor blooms of the harmful algae Karenia brevis (red tide) and will open areas to harvesting when safe. Effective Tuesday, January 31, only Espiritu Santo Bay will remain open to commercial oyster harvesting. For the latest information on the opening and closing of oyster harvest areas, please call DSHS at 1-800-685-0361.

Analysis

A harmful algal bloom continues in patches in the Galveston Bay and Port Aransas/Corpus Christi Bay areas; however, samples and satellite imagery indicate that *Karenia brevis* concentrations are dissipating.

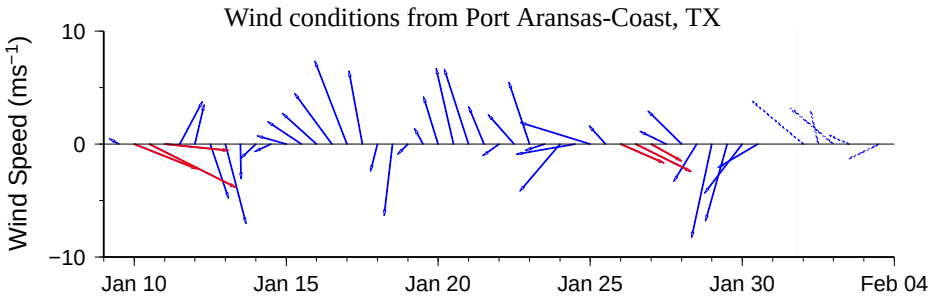
Recent samples collected throughout the South Padre Island region, including alongshore southern South Padre Island (Gulf side), within Brazos Santiago Pass, and within the lower Laguna Madre, confirmed that *K. brevis* is not present in the area (1/26-27; TPWD).

No new samples have been received from the Galveston, Matagorda, or Port Aransas/Corpus Christi Bay areas. The most recent sampling efforts identified 'not present' to 'low a' *K. brevis* concentrations in both the Galveston and Aransas Bay regions (1/23; TPWD), and indicated that *K. brevis* is not present in the Matagorda Bay region (1/17-19; TPWD).

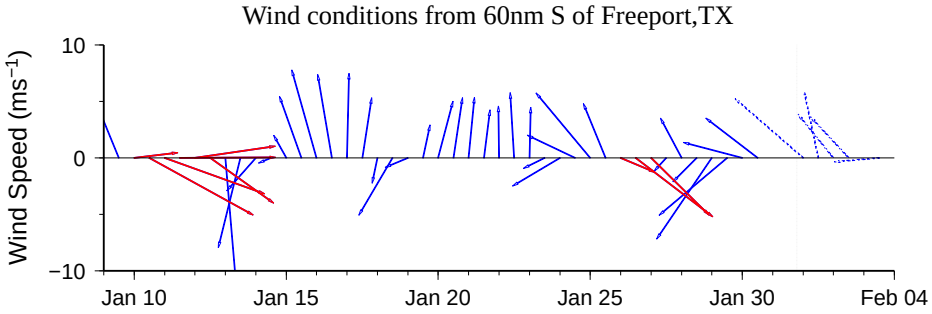
In recent MODIS imagery (1/27; shown left), elevated chlorophyll (2 to 7 μg/L) is visible stretching along and offshore from Bolivar Roads Pass to south of the Rio Grande. MODIS imagery from 1/28 (not shown) also indicates elevated to very high (4 to >20 μg/L) stretching along- and offshore from Sabine Pass to Bolivar Roads Pass, though it is unlikely that this patch of elevated chlorophyll contains *K. brevis*. Elevated chlorophyll at the coast is not necessarily indicative of the bloom's extent and may be due to the continued resuspension of benthic chlorophyll and sediments; in-situ sampling is required to confirm the presence of *K. brevis*.

Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 75km south from the Galveston Bay region, 120km south from the Matagorda Peninsula region, and 30km south from the Port Aransas region from January 28 to February 2. Onshore winds forecasted over the next several days may increase the potential for impacts along the Texas coastline.

Derner, Kavanaugh



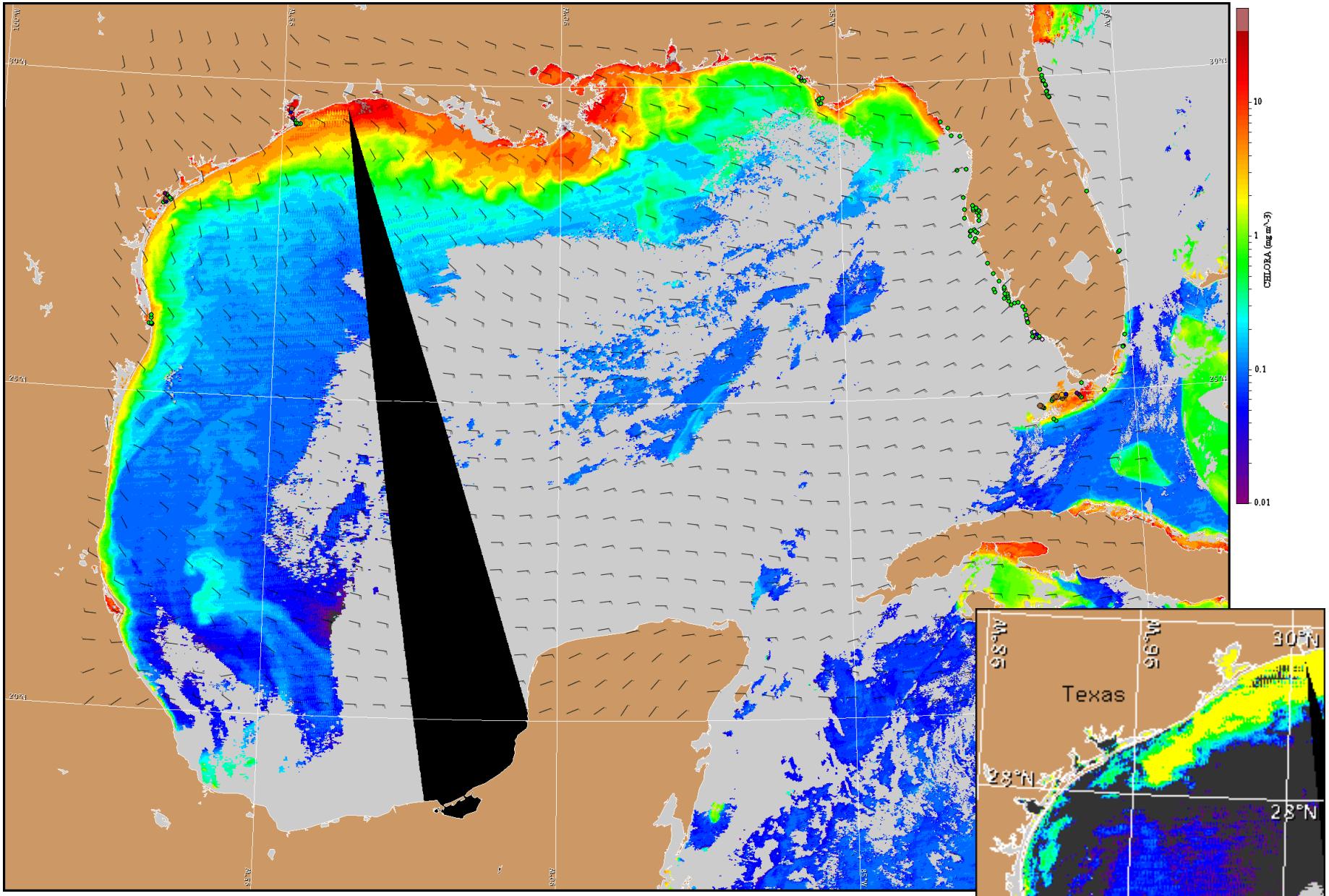
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Wind Analysis

Port Aransas: East winds (5-10kn, 3-5m/s) today becoming southeast (5-15kn, 3-8m/s) this afternoon through Wednesday. East winds (5-15kn) Wednesday afternoon through night.

Galveston/Freeport: Southeast winds (5-15kn) today through Wednesday.



Satellite chlorophyll image and forecast winds for January 31, 2012 12Z with cell concentration sampling data from January 20 to 27 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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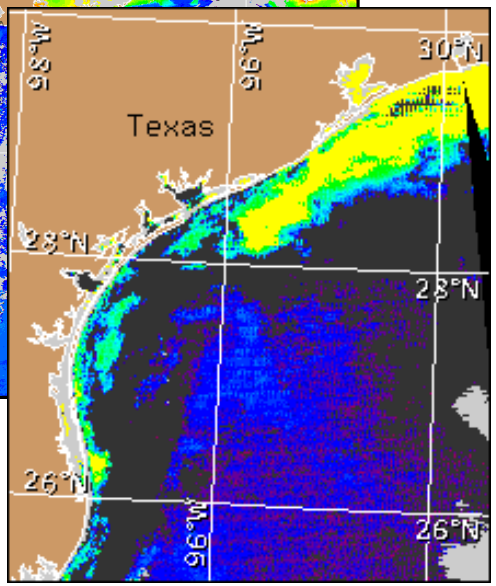

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).